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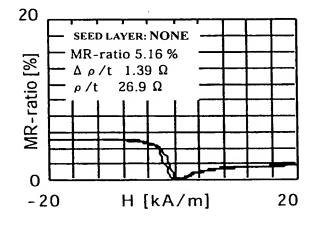
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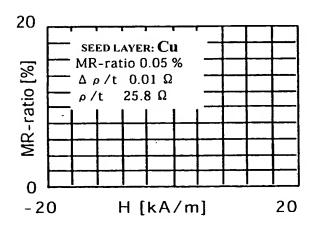
## FIG.1

PROTECTION LAYER
FREE MAGNETIC LAYER
NON MAGNETIC LAYER
SECOND PINNED MAGNETIC LAYER
ANTI FERRO MAGNETICALLY COUPLING LAYER
FIRST PINNED MAGNETIC LAYER
SEED LAYER

# FIG.2



### FIG.3



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FIG.4

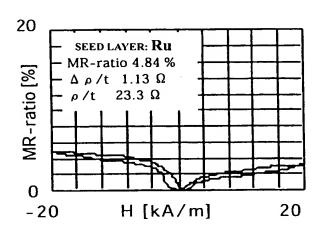


FIG.5

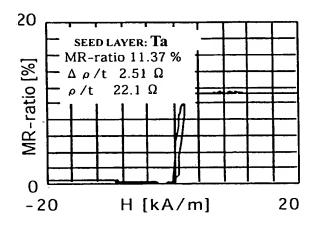
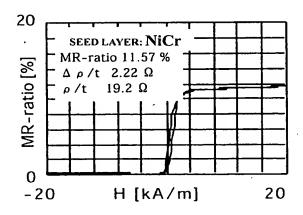


FIG.6



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FIG.7

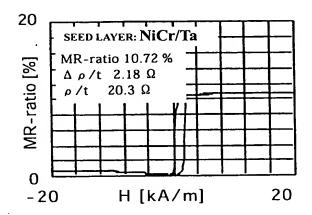
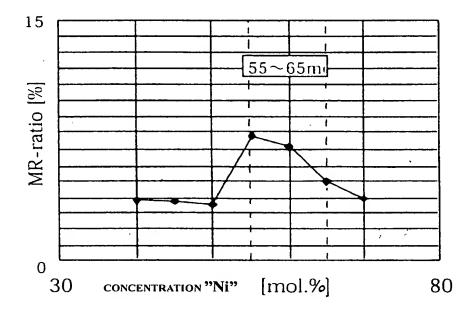


FIG.8



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FIG.9

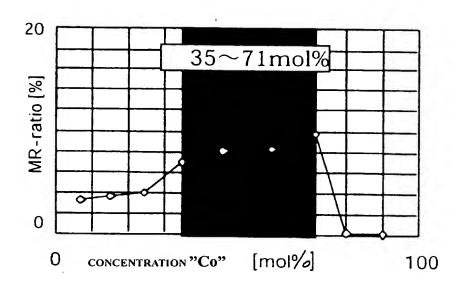
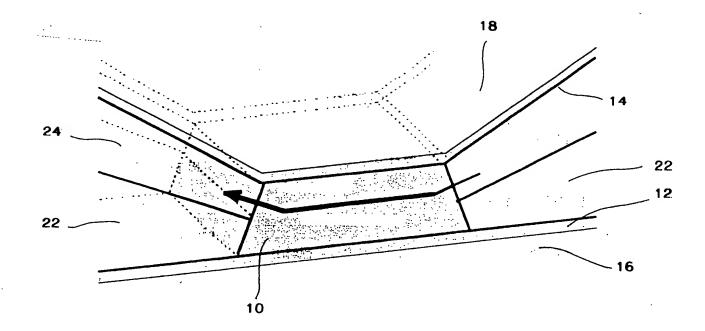


FIG.10
BACKGROUND ART



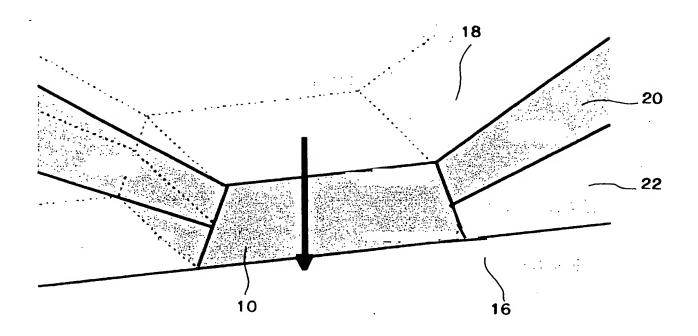
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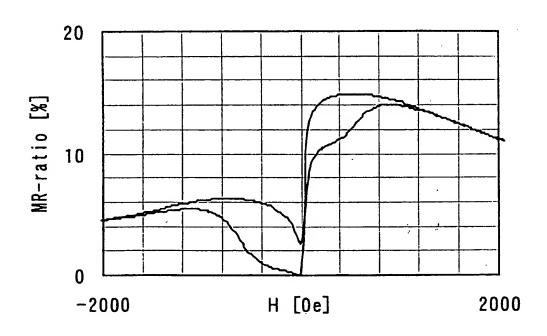
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FIG.11

### **BACKGROUND ART**



**FIG.14** 



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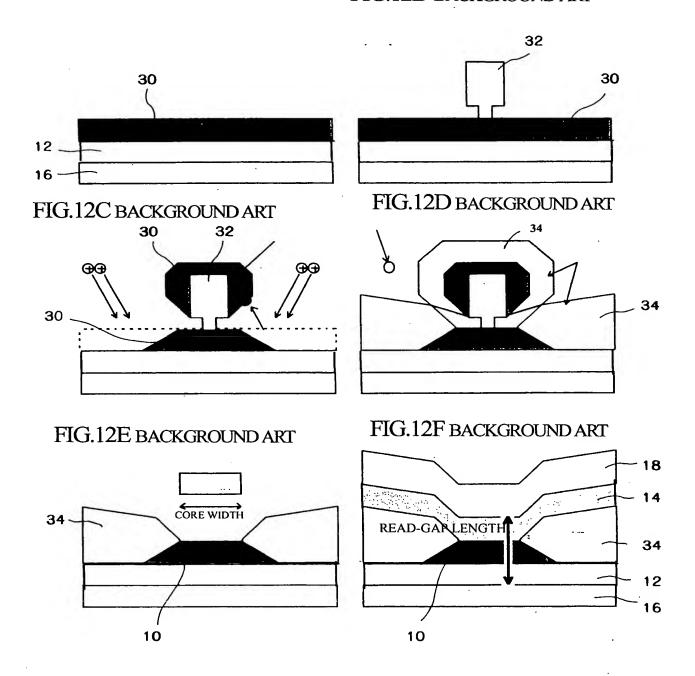
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#### FIG.12A BACKGROUND ART

#### FIG.12B BACKGROUND ART



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FIG.13A BACKGROUND ART

FIG.13B BACKGROUND ART

